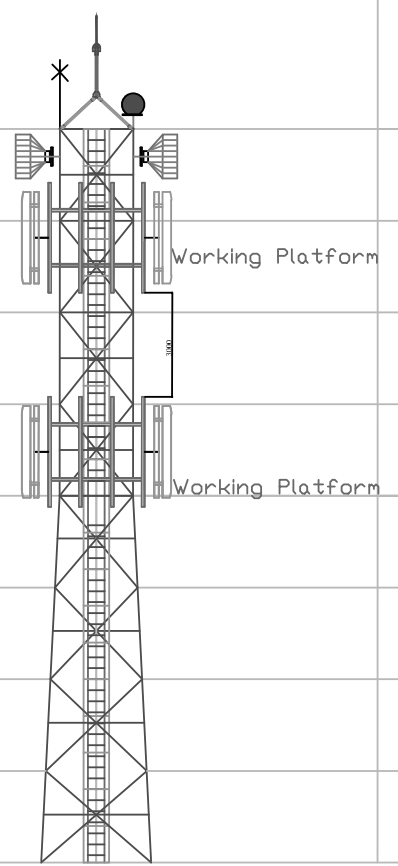
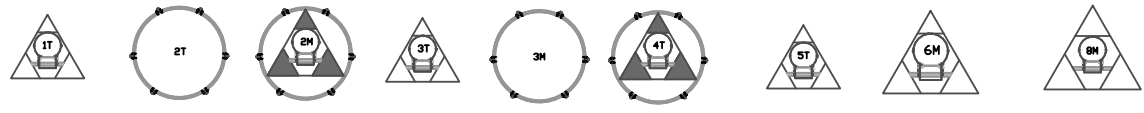


LEVEL	20000	2000	20000
FACE WIDTH	17500	2000	17500
PLATFORM	15000	2000	15000
	12500	2000	12500
	10000	2000	10000
	7500	2250	7500
	5000	2500	5000
	2500	2750	2500
	0000	3000	0000
	LEG JOINT NAME	A	
LEG LENGTH	2500	2500	2500
LEGS SIZE	65x65x5	70x70x5	80x80x8
PANEL NO	1	2	3
LENGTH(METER)	2.5	2.5	2.5
DIAGONALS	50x50x4	50x50x4	50x5
PANEL TOP- HORIZONTALS	50x50x4	50x50x4	
PANEL MID- HORIZONTALS	45x45x04	45x45x04	50x50x4
PLAN BRACING	50x50x4		50x50x4
SEC. BRACING			50x50x4



PLAN VIEWS

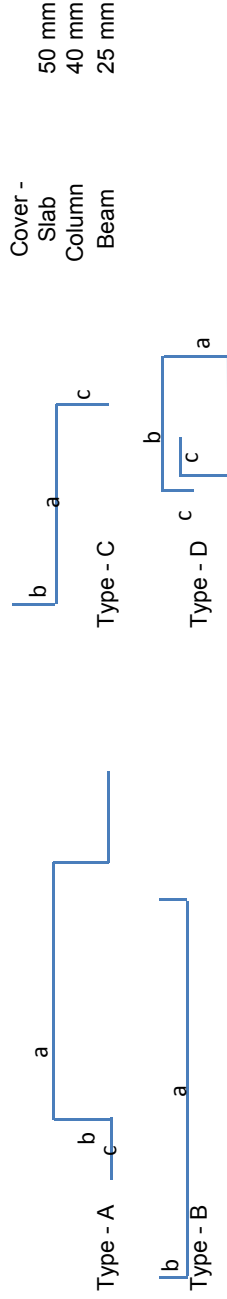


1) Remote Radio Head- 6nos (Total Weight 102kgs.) 2) Sectoral Antennas - 6nos (Total Weight 210kgs.) 3) Microwave Antennas (0.6m)-2nos (Total Weight 40kgs.)	TITLE	20 METER TOWER	Wind Speed	180 KMPH	Design	TIA/EIA-222 G
	SUB. TITLE	TRIANGULAR ANGULAR TOWER	Deflection	< 1.0 Degree	Rev.	1
	Drawing No.	BT-2023-02	Loading	352 kgs.	Drawn Date	19-11-2022
	BHUTAN TELECOM LTD. BHUTAN			Tower Weight 3050 kgs.		

Bhutan Telecom 2023 Project				
Technical Specification sheet of 20 mtr. 3 Legged Angular Tower BT-2023-02				
S.No.			DETAILS	REMARK
1		<b>DESIGN SPECIFICATION</b>	(ANSI/TIA-222G)	
	1.1	Design Wind Velocity		
		Survival	180 KMPH	
	1.2	Twist & Sway	Less than 1.0 degree	
	1.3	Factor of Safety	1.2 For Dead Load	
			1.6 For Wind Load	
	1.4	Antenna Loading	352 Kg	
		Remote Radio Head	6 Nos ( 17 Kg)	102 Kg
		Sectorial Antenna	6 Nos ( 35 Kg)	210 Kg
		MW Antenna	2 Nos 0.6 m Dia (20 Kg)	40 Kg
	1.5	Antenna Mounting Structure	GSM mount - 6 Nos MW Mount - 2 Nos	
2		<b>Obstruction Light System</b>		
	2.1	No .Of Obstruction Light Lamp&Watts	1 No. LED Type	
	2.2	Power Cable Type&Length	2.5 Sqmm x 30 mtr. Length	2 core armoured
3		<b>Lighting Protection</b>		
	3.1	Lightning Arrestor	1.2mtr long	1 nos
4	4.1	<b>Structure Of Tower</b>	Self Suppprtng 3 legged Angular construction with vertical ladder in the center intergrated with cable tray & horizontal cable tray from tower to Building	
	4.2	Main Leg	90 Degree Angle	
	4.3	Bracing	90 Degree Angle	
	4.4	Climbing Ladder	450 mm Rung Width, 300mm Rung space & 700mm Hoop	
	4.5	Cable Tray Verticle	450 mm Width	along the tower Height
	4.6	Cable Tray Horizontal	450 mm Width	6 MTR.
	4.7	Platforms		
		Working	2 Nos	
		Rest	0	
5		Foundation bolt & Template	As Per Tower Design	Included
	5.1	Bolts & Nut with spring &	Hot Dipped Galvanized Property Class 5.6	Extra 5% will be provided
	5.2	Plane washer	As per Standard <b>ASTM A 153</b>	
	5.3	Hot Dipped Galvanization	As per Standard <b>ISO 1461</b>	85 Microns
6	6.1	Weight Per Tower	3050 Kgs	(+/-) 5%
	6.2	Drawing No	BT-2023-02	



**Bar Bending Schedule of 20m high 3legged tower**



Item	Position	Type	Dia. Of Rebar (mm)	Size	Size	Size	Length	Qty in Nos both ways or total	Unit wt (kg/m)	Total Weight of (kg)	
				a (mm)	b (mm)	c (mm)	(mm)				
Raft Slab	Top	B	B10	2000	150	-	2300	66	0.62	94	
	Bottom	B	B10	2000	150	-	2300	78	0.62	111	
Tie Beams	Top	B	B16	3153	300	-	3753	6	1.58	36	
	Bottom	B	B16	3153	300	-	3753	6	1.58	36	
	Strips	D	B8	250	250	80	1160	54	0.40	25	
	Main	C	B16	2700	309	600	3609	24	1.58	137	
Column	Ties	D	B8	317	317	80	1428	57	0.40	32	
		D	B8	224	224	80	1057	57	0.40	24	
								Total (5% extra considered)			550

\* Chairs Shall be Provided whenever required

Notes :

1. Dimensions of Bars are along the Center Lines.
3. Splicing of Bars should not be more than 50%. Length of splice as per Standards.